## THREE-DIMENSIONAL GEOMETRIC SPACE LOOP ANTENNA

## ABSTRACT OF THE DISCLOSURE

[0065] An antenna system includes a first portion and a second portion. The first portion and the second portion form an antenna loop. The first portion may be etched on a printed circuit board. The second portion may be coupled with the first portion or extend from the first portion. The first portion and the second portion each may have one or more turns. Further, the second portion of the antenna loop resides in a three-dimensional geometric space that is different from the first portion of the antenna loop. The antenna system is particularly well suited for electronic devices having a confined internal space, for example, a cordless pointing device, a cordless gaming device, or a cordless camera device. A method for designing an antenna system is also disclosed.

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